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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,385

03/22/2007

Heike Hilgers

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01/22/2009

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EXAMINER

SHABMAN, MARK A

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

01/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,385	<b>Applicant(s)</b> HILGERS, HEIKE	
	<b>Examiner</b> MARK SHABMAN	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, see pages 3-5, filed 16 September 2008, with respect to the rejection(s) of claim(s) 5-8 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new prior art references.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 5 and 7-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant admitted prior art in view of Ludolf DE10122733 in view of the Polymer Handbook.

Regarding **claim 5**, the applicant admitted prior art discloses a typical test leak unit comprising a container in which a volume of a test gas mixture is kept at a controlled pressure, further comprising a membrane. The background describes the typical test gas mixture as comprising hydrogen and nitrogen. Ludolf discloses a test leakage device comprising a membrane constructed from silicon oxide. It would have

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been obvious to one of ordinary skill in the art at the time of invention to have used the membrane of Ludolf with the invention as noted in the background as it would potentially allow for temperature controlled measuring of leak rate, thus simulating potential operating conditions. Also, as noted in the Polymer handbook, a typical form of Silicon oxide polymer such as polydimethylsiloxane has a permeation coefficient for nitrogen of 50.1% that of hydrogen which falls within the range specified.

Regarding **claim 7**, the added gas of Nitrogen is "oxygen-free" as claimed.

Regarding **claim 8**, as disclosed in the background, the prior art normally uses a gas mixture of 5% hydrogen which is lower than the 10% claimed.

**Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Ludolf in view of the polymer handbook as applied to claim 5 and further in view of Inai US Patent 6,815,107 B2.

Regarding **claim 6**, Ludolf and the admitted prior art do not disclose using helium, carbon dioxide or methane as the added gas. Inai discloses a gas leak detection method which uses a gas such as helium or carbon dioxide to measure a gas leak from a membrane to determine total leakage. It would have been obvious to one of ordinary skill in the art at the time of invention to have substituted a gas such as Helium for the Nitrogen described as Helium would be easier to detect as it is not as prevalent in the ambient air as Nitrogen. Further, it falls within the range claimed in claim 5 as well.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK SHABMAN whose telephone number is (571)270-3263. The examiner can normally be reached on M-F 8:00am - 4:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. S./  
Examiner, Art Unit 2856  
/Hezron Williams/  
Supervisory Patent Examiner, Art Unit 2856